

Fundamentals of Light and Optics

Optics · Practice Test · 10 Questions

1. What is the primary source of light for the Earth?

- A) The Moon
- B) The Sun
- C) A flashlight
- D) A candle

2. Which of these objects is transparent, allowing most light to pass through it?

- A) A wooden door
- B) A clear glass window
- C) A thick metal sheet
- D) A cardboard box

3. What happens when light rays bounce off a smooth, shiny surface like a mirror?

- A) Refraction
- B) Absorption
- C) Reflection
- D) Diffraction

4. Which color of light has the longest wavelength in the visible spectrum?

- A) Red
- B) Violet
- C) Blue
- D) Green

5. What is the name of the phenomenon where light bends when passing from one medium to another, such as from air to water?

- A) Reflection
- B) Dispersion
- C) Refraction
- D) Polarization

6. When white light passes through a prism, it separates into different colors. What is this band of colors called?

- A) A glow
- B) A spectrum
- C) A shadow
- D) A reflection

7. What do we call an object that does not allow any light to pass through it?

- A) Transparent
- B) Translucent
- C) Opaque
- D) Reflective

8. Which part of the human eye acts like a lens to focus light?

- A) The pupil
- B) The cornea
- C) The iris
- D) The eyelid

9. What creates a shadow?

- A) An object blocking light
- B) Light reflecting off a wall
- C) Light bending through water
- D) The sun setting

10. Which of these materials is translucent, letting some light through but scattering it?

- A) Clear glass
- B) Frosted glass
- C) Solid steel
- D) Black construction paper